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Taichi Majima

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EXAMINER

GHOWRWAL, OMAR J

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/594,456	Applicant(s) MAJIMA, TAICHI	
	Examiner OMAR GHOWRWAL	Art Unit 2463	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/22/09 has been entered.

Response to Remarks

2. This Office action is considered fully responsive to the amendment filed 10/22/09.

3. The rejection under U.S.C. 112 has been upheld. The Examiner respectfully disagrees with Applicant's assertion that "uttered" and "unuttered" corresponds with "sonant" and "silent" from the instant specification. According to MPEP 2106, any special meaning assigned to a term "must be sufficiently clear in the specification that any departure from common usage would be so understood by a person of experience in the field of the invention." *Multiform Desiccants Inc. v. Medzam Ltd.*, 133 F.3d 1473, 1477 45 USPQ2d 1429, 1432 (Fed. Cir. 1998). See also MPEP § 2111.01. If the applicant asserts that a term has a meaning that conflicts with the term's art accepted meaning, USPTO personnel should encourage the applicant to amend the claim to better reflect what applicant intends to claim as the invention.

In this case, it is not clear that "sonant" and "silent" refer to "uttered" and "unuttered", as one of ordinary skill in the art could easily construe "unuttered" to mean

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the volume may simply be under a reference level as mentioned in the prior Office action. The Examiner suggests Applicant amends the terms "uttered" and "unuttered" to read as "sonant" and "silent" respectfully.

Response to Arguments

4. Applicant's arguments filed 10/22/09 have been fully considered but they are not persuasive. The same prior art has been kept, see the rejection below pertaining how the prior art reads on the amendments.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. **Claim 11** is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Specifically, the terms "uttered" and "unuttered" are not mentioned anywhere in the specification. For example, page 10, lines 24-30 of the instant specification mention encoding "sonant" or "silent" voice data, and "silent" voice data doesn't necessarily mean a voice is "unuttered" as the volume may simply be under a reference level.

Claim Objections

7. Claim 12 is objected to because of the following informalities: “the step setting” should be “the step of setting”. Appropriate correction is required.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 11-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 99/27745 *JOHNSON et al.* (“*JOHNSON*”) in view of U.S. Patent No. 6,427,135 B1 to *Miseki et al.* (“*Miseki*”) and in further view of U.S. Publication No. 2005/0080870 A1 to *Marks et al.* (“*Marks*”).

As to **claim 11**, *JOHNSON* discloses a communication method used in a group call communication in which communication is performed among a plurality of members belonging to a predetermined group (see fig. 3, communication between different devices), the method comprising the steps of:

at a transmitting end,

encoding and framing an uttered section of an inputted analog voice signal to generate frames of voice data (page 9, lines 3-15, speech coder replaces non voice times with SID frames);

sequentially inputting frames of the generated voice data, and discriminating in a unit of frame which of sonant audio or silent audio is indicated by the inputted voice data

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(page 9, lines 3-15 whenever a voice activity detector VAD determines that voice is no longer active, a transmitter may enter DTX mode, and it ceases to transmit in every one of its assigned timeslots, however it transmits the voice data otherwise, where data is transmitted as voice frames or SID frames);

setting a steal flag of identifying whether or not al of a predetermined number of continuous frames of voice data are sonant audio (page 5, lines 11-20, flag F1 shows presence of speech data);

replacing the voice data which is discriminated that it indicates silent voice with silence descriptor "SID" frames (page 9, lines 7-10);

and performing wireless transmission of SID frames, and voice data indicating voice and the steal flag, at a transmitting end (page 5, lines 11-20, flag F1 shows presence of speech data; page 9, lines 3-31, DTX periods and non-DTX periods are transitioned between each other when a speech frame and SID frames are transmitted with each other; hence voice is transmitted w/ a steal flag and SID frames are transmitted separately).

and at a receiving end, receiving a signal which has been wirelessly transmitted (page 9, lines 14-31);

discriminating the voice data, the SID frames and a content of the steal flag (page 9, lines 14-31, DTX vs. non DTX periods; page 5, lines 11-20, flag F1 shows presence of speech data);

determining how the received signal is to be reproduced, on the basis of the SID frames and the discriminated content of the steal flag (page 9, lines 14-31, depending

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on the state is a DTX period, "comfort noise" or voice is played, i.e. when not in DTX, regular voice with the steal flag is received);

and when it is determined that the received signal is to be reproduced, reproducing voice data for voice data sections and reproducing silence for sections of the SID frames (page 9, lines 14-31, depending on period, "comfort noise" (no voice) based on silence descriptor or voice is played).

JOHNSON does not expressly disclose encoding and framing *the whole* of an inputted analog voice signal *regardless whether the signal is in an uttered section or an unuttered section* to generate voice data; replacing the voice data which is discriminated that it indicates silent voice with *data identifying of the group*, performing wireless transmission of the replaced data of identifying the group *together* with voice data indicating voice and the steal flag.

Miseki discloses an input speech signal is separated into a speech component and a background noise component, and both of them are encoded (abstract). Furthermore, fig. 2 discloses the speech and background noise components are multiplexed and transmitted together.

JOHNSON and *Miseki* are analogous art because they are from the same field of endeavor with regards to data processing.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to incorporate the encoding all data as taught by *Miseki* into the invention of *JOHNSON*. The suggestion/motivation would have been to encode speech at a low bit

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rate that includes background noise that is as close to the original speech as possible (Miseki, col. 1, lines 10-15).

Marks discloses one or more header fields in requests from a client may be replaced by a group header identifier (para. 0006).

JOHNSON, Miseki and *Marks* are analogous art because they are from the same field of endeavor with regards to data processing.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to incorporate the replacing header fields with a group header identifier as taught by *Marks* into the invention of *JOHNSON* and *Miseki*. The suggestion/motivation would have been to reduce overhead of the messages transmitted (*Marks*, para. 0006).

As to claim 12, *JOHNSON, Miseki* and *Marks* further disclose the communication method according to claim 11, wherein the transmitting end further comprises a step of forming a transmission frame from the voice data and the replaced data of identifying the group (*JOHNSON*, figs. 2, 5, speech is transmitted in frames, *Marks*, para. 0006, group identification in header, i.e. a frame with a header), the step setting a steal flag which shows the presence of the voice data at the time of transmission (*JOHNSON*, page 5, lines 11-20, flag F1 shows presence of speech data);

and wherein the receiving end further comprises a step of discriminating the presence of the replaced data of identifying the group on the basis of the steal flag in the received signal (*JOHNSON*, page 6, lines 14-15, steal flag F1 utilized in determining whether a given received frame contains speech, i.e. if it is present, there is not any

silent data (data identifying group of Marks)). In addition, the same suggestion/motivation of claim 11 applies.

10. **Claims 13-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 99/27745 *JOHNSON et al.* ("*JOHNSON*") in view of U.S. Publication No. 2005/0080870 A1 to *Marks et al.* ("*Marks*").

As to **claim 13**, *JOHNSON* discloses a receiving method used in a group call communication in which communication is performed among a plurality of members belonging to a predetermined group (see fig. 3, communication between different devices), the method comprising the steps of:

receiving by a reception unit a wireless transmitted signal including voice data of representing voice, and a steal flag of identifying whether or not all of a predetermined number of continuous frames of voice data are sonant audio, FACCH identifying signal voice data indicative of silence (figs. 2, 5, page 6, lines 11-14, grouped frames FR within multiframe MF2 can contain either speech or control signals, page 2, lines 23-25 as is understood in the art FACCH control signals cause a speech decoder to mute, i.e. transmitter constructs multiframe MF1 to be made up of speech frames, but some of them are silent, page 6, lines 14-15, steal flag F1 utilized in determining whether a given received frame contains speech);

discriminating by a reception unit the voice data, the FACCH and a content of the steal flag in the received signal (fig. 2, 5, receiver detects speech frames from FACCH frames (MF2-MF3), page 6, lines 14-15, steal flag F1 utilized in determining whether a given received frame contains speech);

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determining by a reception unit how the received signal is to be reproduced, on the basis of the FACCH and the content of the steal flag (fig. 2, 5, receiver detects speech frames from FACCH frames, reproduces the data in MF3 (page 6, lines 14-15, steal flag F1 utilized in determining whether a given received frame contains speech));

and when it is determined that the received signal is to be reproduced, reproducing voice data for voice data sections and reproducing silence for sections of the FACCH, by using a reproduction unit (fig. 2, 5, receiver detects speech frames from FACCH frames, reproduces the data in MF3, page 2, lines 23-25 as is understood in the art FACCH control signals cause a speech decoder to mute).

JOHNSON does not expressly disclose receiving by a reception unit a wireless transmitted signal including *data identifying the group, replacing* the voice data which is discriminated that it indicates silent voice with *data identifying of the group*.

Marks discloses one or more header fields in requests from a client may be replaced by a group header identifier (para. 0006).

JOHNSON and *Marks* are analogous art because they are from the same field of endeavor with regards to data processing.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to incorporate the replacing header fields with a group header identifier as taught by *Marks* into the invention of *JOHNSON*. The suggestion/motivation would have been to reduce overhead of the messages transmitted (*Marks*, para. 0006).

As to **claim 14**, see similar rejection for **claim 13**. The method teaches the apparatus.

As to claim 15, *JOHNSON and Marks* further discloses the receiving apparatus according to claim 14, wherein the reception means operates so as to receive a frame signal (*JOHNSON*, fig. 2, 5 multiframe);

wherein the detection means operates so as to detect predetermined data in a voice signal included in the frame signal (*JOHNSON*, fig. 2, 5, detecting speech frames);

wherein the reproduction means operates so as to reproduce the voice signal in the frame signal which is received by the reception means (*JOHNSON*, fig. 2, 5, reproducing speech frames in MF3), and further to reproduce the predetermined voice when data of identifying the group data is detected by the detection means (*JOHNSON*, fig. 2, 5, reproducing speech frames and FACCH frames in MF3, i.e. using group identifier of Marks for FACCH);

and wherein the control means operates to execute processing based on the data of identifying the group detected by the detection means (*Marks*, para. 0006, requests processed based upon the respective group header identifiers). In addition, the suggestion/motivation would have been to reduce the overhead of messages transmitted (*Marks*, para. 0006).

As to claim 16, *JOHNSON and Marks* further discloses the receiving apparatus according to claim 15, wherein a predetermined control flag which shows the presence of the data of identifying the group is set in the frame signal (*JOHNSON*, page 5, lines 11-20, flags F1 and F2 distinguish speech from FACCH, i.e. using group identifier of Marks for FACCH);

and wherein the detection means operates so as to detect the data of identifying the group on the basis of the predetermined control flag (JOHNSON, page 6, lines 14-15, steal flags F1 and F2 are utilized in determining whether a given received frame contains speech or FACCH, i.e. using group identifier of Marks for FACCH). In addition, the suggestion/motivation of claim 15 applies.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OMAR GHOWRWAL whose telephone number is (571)270-5691. The examiner can normally be reached on Monday-Thursday, 8:00am-5:00pm est..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derrick Ferris can be reached on (571)272-3123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/O. G./
Examiner, Art Unit 2463

/Derrick W Ferris/
Supervisory Patent Examiner, Art Unit 2463